Scholarship of Teaching: 
What Does it Mean? Why is it important?

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PACE- Teaching Certificate
4-6-22
Reframe your thinking about daily activities in academia
Learning Objectives

- Define & Describe scholarship in academic medicine (Boyer’s & Glassik)
- Recognize the value of scholarship
- Describe a broad range of activities that constitute educational scholarship
- Identify how to get started with educational scholarship
- Determine existing outlets to publish educational products
Core Mission

Education

Research

Patient Care

Scholarship by Definition

- Activities which demonstrate a faculty member’s discipline or content expertise in the discovery, acquisition, application, integration, synthesis or creation of knowledge and creative works
Standards for Assessing Scholarship: Glassik’s Criteria

- Clear Goals
- Adequate Preparation
- Effective Methods
- Meaningful Results
- Effective Presentation
- Reflective Critique

◦ Glassik, CE Academic Medicine 2000
• Definition is under Marshall University BOG policy: https://www.marshall.edu/board/files/MUBOG-AA-26-Faculty-Promotion-2020-01.pdf

• Research, Scholarship, and Creative Activities responsibilities and duties may include, but are not limited to: number, quality and importance of publications and creative productions; memberships and contributions to professional societies; professional growth and development; scholarly presentations and creative performances; and contributions to the professional development and achievement of colleagues.
Why do scholarship?

• To Develop Self
  – To improve the way you teach
  – To improve what and how your students learn
  – To improve your clinical care
  – To make advances in science

• To Develop Others

• To change policy or procedures
  – Improve medical education
  – Improve Patient’s health
  – Improve quality and safety
  – To be recognized as an expert

• Promotion or official change in status
  – Institutional recognition of scholarship
  – National recognition

"Once you stop learning, you start dying"
~ Albert Einstein ~
Typical Model of Scholarship

Academic Medicine

Research

Clinical Care

Teaching
What is Educational Scholarship?

• Addressing Problems

  – “...Redefine the word “problem.” Something that is a “problem” in your teaching is not something to be sidelined, or avoided. Instead, it is an avenue for exploration – a “problem” is a research opportunity.”

• Innovations

Rowland & Myatt; Biochem Mol Biol Educ. 2014; 42(1): 6-14
Educator Activity Categories

Possible area for scholarship

## Use Daily Activities

<table>
<thead>
<tr>
<th>Questions to ask</th>
<th>Scholarship Domain</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is known? What is yet to be found?</td>
<td>Discovery</td>
<td>Faculty in a student led program</td>
</tr>
<tr>
<td>How do these findings fit together..with what is already known?</td>
<td>Integration</td>
<td>Analyze effective teaching methods</td>
</tr>
<tr>
<td>How can what is known be applied to consequential problems?</td>
<td>Application</td>
<td>Curriculum advisor Physical diagnosis course</td>
</tr>
<tr>
<td>How can what is known be shared? How can what is known be transformed?</td>
<td>Teaching</td>
<td>Present at a national meeting</td>
</tr>
</tbody>
</table>

Boyer, E.L (1990): Scholarship reconsidered: Priorities of the professoriate
Application of Knowledge to Solve Educational Problems:

Clerkship failing – frustration/dissatisfaction

Specific interventions and curriculum restructure implemented

Post-intervention evaluation conducted in several formats

Results shared

Defining Features of Scholarship - Framework

What do I want to know about my teaching or about learning?
How can we improve care for this patient population?
How can I address a challenge in the clinic?

Questioning

Gathering & Exploring Evidence
What evidence do I have?
What evidence can I collect and how?

Trying Out & Refining Insights
How can I make improvements based on what I’m learning?
How can I assess changes in my teaching or patient care?

Disseminating Your Work
Public Peer Reviewed Platform for Others to build

Adapted from Huber & Hutchings (2005)
Examples of Educational Scholarly Product & Outcome Measures

- Knowledge (exams, quizzes, pre and post assessments)
- Skills (observation, OSCE, OSTE)
- Attitudes (questionnaires, interviews)
- Behaviors (360 degree reviews, vignettes, record audits, patient interviews)
Kirkpatrick’s levels of evaluation (adapted for education)

RESULTS
Impact on patients
Change in organizational practice

BEHAVIOR
Change in behavior

LEARNING
Acquisition of knowledge or skills
Change in attitudes and perceptions

REACTION
Evaluation of experience

Knowledge, Skill and Attitude
# Activities for Scholarship

<table>
<thead>
<tr>
<th>Activity</th>
<th>Making it Count Twice!</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discovery</td>
</tr>
<tr>
<td>Develop a new system for resident hand-offs</td>
<td>Modify and evaluate a new worksheet for hand-offs</td>
</tr>
<tr>
<td>Participate in a TBL clinical session in Physiology</td>
<td>Present a workshop at national or regional meeting on TBL</td>
</tr>
</tbody>
</table>


Glassick, Charles, E; Academic Medicine, 2000; 75 (9): 877-880
An Escape Room to Orient Preclinical Medical Students to the Simulated Medical Environment

March 25, 2022

The authors address student discomfort in the simulation environment by providing a hands-on exploration of critical features of the patient room and maintain in the guise of a routine clinic visit.

Addressing the Opioid Crisis: A Dynamic Case-Based Module Set for Interprofessional Educators, Learners, and Clinicians

March 24, 2022

This module aligns with the 2016 CDC Opioid Prescribing Guideline and focuses on safe prescribing, recognizing and treating opioid use disorders, and opioids and pain management.

Screening for Toxic Stress Response and Buffering Factors: A Case-Based, Trauma-Informed Approach to Health Equity

March 4, 2022

A workshop provides second-year medical students with the skills to screen for toxic stress, buffering, and brief in-clinic resiliency-fostering tools for trauma-informed patient care that address health disparities and inequities.
Educational Scholarly Product Examples

• Surgery 101 Podcast: Episodes 41-50
  – https://www.mededportal.org/publication/9028/
• Interactive Case-Based Clinical Approach to the Painful Shoulder, Elbow, and Cervical Neck
  – https://www.mededportal.org/publication/10294/
• Orientation to the Operating Room: An Introduction to the Surgery Clerkship for Third-Year Medical Students
  – https://www.mededportal.org/search/?q=general%20%20Surgery
• Implementing an Objective Structured Teaching Exercise (OSTE) in an OBGYN Residency Program
  – https://www.mededportal.org/publication/9425/
• Teaching Patient Handoffs to Medical Students in Obstetrics and Gynecology: Simulation Curriculum and Assessment Tool
  – https://www.mededportal.org/publication/10479/
• Interprofessional Train the Trainer Workshop: Teaching Geriatrics to Change Behavior
  – https://www.mededportal.org/publication/9458/
Funding Sources for Medical Education Research Grants

- Agency for Healthcare Research and Quality (AHRQ) Grants
  https://www.ahrq.gov/funding/index.html

- American Association of Neurology Educational Research Grants:
  – http://www.aan.com/go/education/eduresearch

- Amgen Foundation
  – http://www.amgen.com/citizenship/IME_overview.html

- Arnold P. Gold Foundation:
  – http://www.gold-foundation.org/programs/

- Arthur Vining Davis Foundations:

- Association of Professors of Gynecology and Obstetrics (APGO)
  – https://www.apgo.org/grants-awards/

- Association for Surgical Education Foundation - Center for Excellence in Surgical Education, Research and Training.
  – https://surgicaleducation.com/cesert-grants/
Funding Sources for Medical Education
Research Grants - Continued

• AstraZeneca Medical Education Research Grants:
  – http://www.astrazenecagrants.com/

• Fund for the Improvement of Postsecondary Education (FIPSE):
  – http://www2.ed.gov/about/offices/list/ope/fipse/index.html

• The Henry J. Kaiser Family Foundation,
  – http://www.kff.org/

• HRSA-U. S. Department of Health and Human Services
  – http://www.hrsa.gov/

• Josiah Marcy, Jr. Foundation:
  – http://www.macyfoundation.org/apply

• National Institutes of Health

• NBME Stemmler Medical Education Research Fund:
  – http://www.nbme.org/research/stemmler.html
Funding Sources for Medical Education Research Grants - Continued

- NSF Directorate for Education and Human Resources:

- The PEW Charitable Trust:

- Pfizer Medical Education Grants:

- RSNA Foundation Radiology Education Grants:
  - [https://www.rsna.org/Education_Scholar_Grant.aspx](https://www.rsna.org/Education_Scholar_Grant.aspx)
  - [https://www.rsna.org/Radiology_Education_Research_Development_Grant.aspx](https://www.rsna.org/Radiology_Education_Research_Development_Grant.aspx)

- The Robert Wood Johnson Foundation:
  - [http://www.rwjf.org/index.jsp](http://www.rwjf.org/index.jsp)

- Society for Academic Continuing Medical Education, Research Grants in Continuing Medical Education
  - [http://www.sacme.org/SACME_grants](http://www.sacme.org/SACME_grants)
Institutional Review Board (IRB)

Your project may be classified as...

- Exempt
- Expedited
- Full Review

Insert an image of your Institutional Review Board or Human Investigative Committee website or handbook
Thank you!
Any ???

shah@marshall.edu